

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

Rec'd PCT/PTO 13 MAY 2005

PCT

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NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

Date of mailing
(day/month/year)

14.09.2004

Applicant's or agent's file reference
77402-100

IMPORTANT NOTIFICATION

International application No.
PCT/IB 03/06390

International filing date (day/month/year)
18.11.2003

Priority date (day/month/year)
18.11.2002

Applicant
PERFORMANCE PLANTS, INC.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international
preliminary examining authority:



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PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

| | | |
|---|---|--|
| Applicant's or agent's file reference 77402-100 | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/IB 03/06390 | International filing date (<i>day/month/year</i>) 18.11.2003 | Priority date (<i>day/month/year</i>) 18.11.2002 |
| International Patent Classification (IPC) or both national classification and IPC C12N15/82 | | |
| Applicant PERFORMANCE PLANTS, INC. | | |
| <p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p> | | |
| <p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the opinion II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application | | |
| Date of submission of the demand 18.06.2004 | Date of completion of this report 14.09.2004 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office - Gitschiner Str. 103 D-10958 Berlin Tel. +49 30 25901 - 0 Fax: +49 30 25901 - 840 | Authorized Officer De Kok, A Telephone No. +49 30 25901-314 | |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/IB 03/06390**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-70 as originally filed

Claims, Numbers

1-61 as originally filed

Drawings, Sheets

1/5-5/5 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☒ furnished subsequently to this Authority in written form.
- ☒ furnished subsequently to this Authority in computer readable form.
- ☒ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☒ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/B 03/06390**

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-61 |
| | No: Claims | |
| Inventive step (IS) | Yes: Claims | 1-61 |
| | No: Claims | |
| Industrial applicability (IA) | Yes: Claims | 1-61 |
| | No: Claims | |

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. **Reference** is made to the following document:

D1: WO 02/16655 A (SYNGENTA PARTICIPATIONS AG ; SCRIPPS
RESEARCH INST (US)) 28 February 2002

2. **Novelty and inventive step** (Articles 33(2) and (3) PCT):

2.1 The document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and discloses (see abstract, claim 144 and seq.id.no. 4755) part of seq.id. no. 5 (nucleotides 1-487) and seq.id.no. 4 (nucleotides 1-282). Since D1 does not disclose the complete sequences identified by seq.id. no. 5 or 4, the subject-matter of **claim 1** is therefore new.

2.2 The problem to be solved by the present invention may be regarded as the identification of plant promoters which have specific expression characteristics (as compared to constitutive promoters).
The solution to this problem proposed in **claim 1** of the present application is the isolation of the hydroxypyruvate reductase (HPR) promoter from Arabidopsis, specific for aerial tissue (seq.id.no. 5) as well as a truncated version thereof (seq.id.no.4), which is inducible by light or environmental (drought) stress. This solution is considered as involving an inventive step because D1 does neither indicate nor suggest the presence of such a promoter in the disclosed sequence.

2.3 **Claims 2-61** are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

3. **Clarity** (Articles 6 PCT):

3.1 **Claims 5 and 6** are in fact dependent on claim 1, as they encompass all the features of this claim.

3.2 **Claims 15 and 25** do not meet the requirements of Article 6 PCT in that the

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/IB 03/06390

matter for which protection is sought is not clearly defined. The claims attempt to define the subject-matter in terms of the result to be achieved (i.e. "...capable of altering an agronomic trait..."), which merely amounts to a statement of the underlying problem, without providing the technical features necessary for achieving this result.